

In the February 13, 2002 Office Action, Examiner Pecone rejected all of claims 1-12, which are all of the claims pending prior to entry of the above-referenced Preliminary Amendment.

Applicants respectfully traverse the Examiner's rejections for the reasons set forth below.

Rejection of Claims 1-12 Under 35 U.S.C. § 102(b)

In the February 2002 Office Action, claims 1-12 were rejected under 35 U.S.C. § 102(b) as being anticipated by McClanahan, U.S. Patent No. 4,613,952. Regarding claim 1, the Examiner contends that "McClanahan teaches about a software program model of an industrial processes [sic] in a plant via a CPU" and that "this simulation system is programmed (i.e., process parameters, fault analysis of simulations of valves and dampers, mimic boards, etc.) for a multi-stage or sequenced operating processes [sic] in an industrial plant." (Office Action, Page 2). As discussed below, these conclusory statements improperly broaden the disclosure of McClanahan, and ignore specific limitations already recited in claims 1-12.

In order to anticipate a claim, the prior art reference must teach every element of the claim. "To anticipate a claim under 35 U.S.C. §§ 102 (a), (b), or (e), the cited reference must contain each and every element as set forth in the claim." Manual of Patent Examining Procedure (Aug. 2001) § 2131 at 2100-69. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference." Id. (citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631 (Fed. Cir. 1987)).

1. McClanahan does not disclose, teach or suggest an apparatus in which is memorized a software apparatus model "which contains a comprehensive mimic image of said apparatus" as recited in claim 1

McClanahan relates to a simulator for industrial plants, but more particularly to "a console and data processing equipment arranged to simulate *more than one industrial plant*."

Col. 1 lines 6-8 (emphasis added). Specifically, McClanahan discloses a simulator that is not “so closely designed to match a particular plant that [it is] not useful for training for another plant.” Col. 1 lines 34-36. McClanahan is concerned with providing a simulator that is “sufficiently flexible to allow simulation of different industrial plants” (Col. 1 lines 64-65).

For example, in an embodiment that simulates a plant having four coal pulverizing mills, in McClanahan’s simulator, “[r]ather than incorporating four master panels only one such panel is used...the functioning of panel F5 can be changed so it associates with any one of four mills.” Col. 11 lines 40-49. Thus, in McClanahan, any differences between the four mills will not be simulated.

McClanahan explicitly criticizes simulators that seek to duplicate identically the instruments in an industrial plant: “[a]nother *disadvantage* of existing simulators is their attempt to duplicate identically a control room.” Col. 1 lines 56-57 (emphasis added).

In contrast, as recited in claim 1, Applicants claim an apparatus in which is memorized a software apparatus model “which contains a *comprehensive mimic image of said apparatus* including its parameters, functionality and sequence programs” (emphasis added). McClanahan does not disclose, teach or suggest creating a comprehensive mimic image of each apparatus used in an industrial process as recited in claim 1. Further, McClanahan says nothing about storing that image in the apparatus itself, as is recited in claim 1. On the contrary, as discussed above, McClanahan teaches away from the use of such a software apparatus model because McClanahan is concerned with the design of a simulator that is flexible enough to simulate multiple plants.

2. McClanahan does not disclose, teach or suggest an apparatus including a software apparatus model which contains a comprehensive mimic image of said apparatus, where said image includes the “parameters, functionality, and sequence programs” of the apparatus, as recited in claim 1

McClanahan’s simulator is directed to a specific purpose: to “test an operator’s proficiency”. Col. 1 lines 17-18. Thus, the simulator operates by allowing the plant operator-trainee and/or the instructor to manually input signals. The simulator responds as follows:

“the programmable means includes a modeling means responsive to the manual signals ...for providing a programmed array of processed values sized to *simulate parameters* existing during operation of the industrial plant.” Col. 2, first paragraph (emphasis added); see also col. 5 lines 39-43. Thus, McClanahan only simulates parameters of the plant. Further, with regard to the schematic of Figs. 10A and 10B, which corresponds to the mimic board of panel 20 (see Col. 11 lines 55-57), McClanahan discloses that “the schematic need only be made as complicated as the level of understanding which the student needs to reach.” Thus, McClanahan’s simulator is not required to maintain a comprehensive software model of each apparatus involved in the industrial process. McClanahan does not disclose, teach or suggest a software apparatus model that includes the “parameters, functionality, and sequence programs” of an apparatus in a “comprehensive mimic image of said apparatus” as recited by claim 1.

3. Claims 2 through 12 and 13-37 are also patentable over McClanahan

Claims 2 through 12, as well as dependent claims 13-37 added in the above-referenced Preliminary Amendment, include the subject matter of claim 1. As discussed above, Applicants submit that claim 1 is patentable over McClanahan. Accordingly, Applicants further submit that claims 2-12 and 13-37 are also patentable over McClanahan.

Further, with respect to claims 3, 4, 6, and 7, the Examiner has not set forth sufficient basis for a rejection based on inherency.

When making a rejection based on inherency, the Examiner must provide rationale or evidence tending to show inherency. “In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that that allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” MPEP § 2112 at 2100-52 (quoting Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original)). “To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.’” Id. at 2100-51 (quoting In re Robertson, 169 F.3d 743, 745 (Fed. Cir. 1999)).

Regarding claim 3, the Examiner concludes that “[b]ecause a CPU is being used for the apparatus, it is inherent that optimal memory could be configured.” (Office Action, Page 3). However, McClanahan does not even mention optimizing memory capacity. Similarly, with respect to claim 4, the Examiner states that “[m]odifying or revising software instructions is inherent in a computer system,” (Office Action, Page 4), but McClanahan teaches nothing about providing an apparatus model that is “modifiable by means of a software program” as particularly recited in claim 4. Likewise, regarding claims 6 and 7, the Examiner’s conclusion that “it is inherent in a computer system that access authorization is configurable” (Office Action, Pages 4 and 5) is not based on anything in McClanahan because McClanahan does not even discuss configuring access authorization.

For at least all of the above reasons, neither McClanahan nor any of the other prior art of record discloses, teaches or suggests an apparatus for use in an industrial process in which a software apparatus model is memorized which contains “a comprehensive mimic image of said apparatus including its parameters, functionality, and sequence programs” as particularly recited in claims 1-37. Accordingly, Applicant respectfully requests that the Examiner’s rejections be withdrawn and that all claims 1-37 be allowed.

Final Remarks

Claims 1-37 of the above-noted application are believed to be in condition for allowance. Applicant respectfully requests that the Examiner so find and issue a Notice of Allowance in due course. The Examiner is asked to call Applicant’s attorneys, James A. Coles, at 317-684-5282, or Christine Orich, at 317-684-5414, to address any outstanding issues in order to expedite the prosecution of this application for all parties.

If necessary, Applicant requests that this Response be considered a request for an extension of time for a time appropriate for the response to be timely filed. Applicant

requests that any required fees needed beyond those submitted with this Response be charged to the account of Bose McKinney & Evans LLP, Deposit Account Number 02-3223.

Respectfully submitted,

BOSE McKINNEY & EVANS LLP



Christine Mayewski Orich
Reg. No. 40,987

Indianapolis, Indiana
(317) 684-5000

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